FORM PTO-1449 (REV. 7-80)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

LIST OF DOCUMENTS CITED BY APPLICANT

(Use several sheets if necessary)

ATTY. DOCKET NO.

TI-22782B

757073 Continuation of Serial No.

09/115,854

APPLICANT

Douglas M. Smith, et al.

FILING DATE 1762 GROUP 1/08/01 To Be Determined U.S. PATENT DOCUMENTS *EXAMINER DOCUMENT FILING DATE INITIAL NUMBER DATE NAME CLASS SUBCLASS (IF APPROPRIATE) 9 C C AA 5,746,992 5/05/98 Yoldas, et al. 423 338 10/05/95 CCAB 5,409,683 4/25/95 Tillotson, et al. 423 338 7/07/94 AC 5,736,425 4/07/98 438 Smith, et al. 778 11/14/96 AD AE AF AG AH FOREIGN PATENT DOCUMENTS TRANSLATION DOCUMENT NUMBER **SUBCLASS** DATE COUNTRY CLASS YES NO ΑI AJ OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) AK AL $\mathbf{A}\mathbf{M}$ BEST AVAILABLE C AN AO AP

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E CC	E.CC AA		3/28/72	Krekeler, et al.		23	182	00	
1	AB	3,689,637	9/5/72	Pade	r	424	52		
	AC	3,860,431	1/14/75	Payne et	al.	252	309		
	AD	3,997,501	12/14/76	McLeo	od	260	37SB		
	AE	4,104,363	8/1/78	Vozka, e	t al.	423	338		
	AF	4,169,926	10/2/79	McDan	iel	526	100		
	AG	4,230,773	10/28/80	Bako	s	428	447		
	AH	4,230,803	10/28/80	Weidenbach et al.		435	176		
	AÏ	4,311,738	1/19/82	Chi		427	387	,	
	AJ	4,548,646	10/22/85	Mosser, et al.		106	14.12		
	AK	4,584,365	04/22/86	Jada et al.		528	271		
	AL	4,608,316	08/26/86	Toda et al.		428	446		
	AM	4,652,467	03/24/87	Brinker e	et al.	427	246		
-	AN	4,713,233	12/15/87	Marsh e	t al.	423	608		
	AO	4,851,150	07/25/89	Hench e	t al.	252	315.6		
-	AP	4,943,542	7/24/90	Hayashi d	et al.	501	12		
	AQ	4,954,327	09/04/90	Bloun	it	423	338		
	AR	4,987,101	01/22/91	Kaanta e	t al.	437	228		
	AS	5,076,980	12/31/91	Nogues e	et al.	264	65		
	AT	5,091,009	2/25/92	Nogami e	et al.	106	287.23		
	AU	5,097,317	03/17/92	Fujimoto	et al.	357	72		
	AV	5,103,288	04/07/92	Sakamoto	et al.	357	71		
Eca	AW	5,139,980	8/18/92	Nakahara	et al.	501	12		
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ξcc	BA	5,155,576	10/13/92	Mizushima		357	C 170)
	BB	5,207,814	05/04/93	Cogliati e	et al.	65	18.3	
	BC	5,226,930	7/13/93	Sasak	i	51	308	
	BD	5,242,647	09/07/93	Poco		264	225	
•	BE	5,270,027	12/14/83	Balducci,	et al.	423	338	
	BF	5,275,796	01/04/94	Tillotson	et al.	423	338	
	BG	5,294,480	03/15/94	Mielke et al.		428	240	
	ВН	5,302,548	04/12/94	Watanabe et al.		437	187	
	BI	5,320,983	06/14/94	Ouellet		437	231	*
	BJ	5,352,637	10/4/94	Fabry, et al.		437	238	
	BK	5,368,887	11/29/94	Hoshino et al.		427	226	
	BL	5,391,364	02/21/95	Cogliati		423	335	
	BM	5,393,712	02/28/95	Rostoker et al.		437	238	
-	BN	5,405,805	04/11/95	Homma		437	195	
	BO	5,409,683	04/25/95	Tillotson et al.		423	338	
-	BP	5,457,073	10/10/95	Ouellet		437	231	
	BQ	5,489,553	02/06/96	Chen		437	195	05/25/95
	BR	5,494,863	2/27/96	Mathur		501	12	12/13/94
	BS	5,496,527	03/05/96	Yokogawa et al.		423	338	04/28/94
	BT	5,522,976	6/4/96	Campet, et al.		204	298.13	6/94
	BU	5,698,483	12/16/97	Ong et al.		501	12	3/17/95
800	BV	5,746,992	05/05/98	Yoldas e	t al.	423	338	10/5/95
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U.S. DEPARTMENT OF COMMERCE FORM PTO-1449 ATTY, DOCKET SERIAL NO. (REV. 7-80) PATENT AND TRADEMARK OFFICE NO. TI-22782B 09/757,073 LIST OF DOCUMENTS CITED BY APPOINT (Use several sheets if necessary) APPLICANT Smith MAR 0 5 2001 FILING DATE 01/08/2001 U.S. PATENTIE DEUMENTS *EXAMINER DOCUMENT FILING DATE INITIAL NUMBER DATE NAME CLASS F APPROPRIATE) CA 5,470,802 11/28/95 8 CC Gnade et al. 437 238 05/20/94 CB 5,472,913 12/05/95 Havemann et al. 437 195 08/05/94 CC 5,488,015 01/30/96 Havemann et al. 437 195 05/20/94 CD 5,494,858 02/27/96 Gnade et al. 231 437 06/07/94 CE 5,504,042 04/02/96 Cho et al. 437 247 06/23/94 CF 5,519,250 05/21/96 Numata 257 632 06/07/95 CG 5,523,615 06/04/96 Cho et al. 257 632 06/07/95 CH 06/11/96 5,525,857 Gnade et al. 313 309 08/19/94 CI 5,536,965 07/16/96 Beratan et al. 257 444 06/07/95 CJ 5,548,159 08/20/96 Jeng 634 257 05/23/95 CK 5,561,318 10/01/96 Gnade et al. 257 638 06/07/95 CL 5,656,848 08/12/97 Beratan et al. 257 446 06/07/95 CM 5,661,344 08/26/97 Havemann et al. 257 758 06/07/95 CN 5,723,368 3/3/98 Cho et al. 437 763 6/7/95 CO 5,736,425 04/07/98 Smith et al. 438 778 11/14/96 ÷ CP 5,747,880 5/5/98 Havemann et al. 257 759 11/18/96 CO 5,750,415 5/12/98 Gnade et al. 427 195 5/27/94 CR 5,753,305 05/19/98 Smith et al. 427 335 11/14/96 5,789,819 CS 08/04/98 Gnade et al. 06/07/95 CT 5,804,508 09/08/98 Gnade et al. 10/23/96 CU 5,807,607 09/15/98 Smith et al. 11/14/96 CV 5,847,443 12/08/98 Cho et al. 11/14/96 CW 5,858,871 01/12/99 Jeng 06/13/96 CX 5,955,140 09/21/99 E CC Smith et al. 11/14/96 FOREIGN PATENT DOCUMENTS TRANSLATION DOCUMENT NUMBER DATE COUNTRY **CLASS** SUBCLASS YES NO CY OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) CZ**EXAMINER** DATE CONSIDERED 14/04 *EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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£ CC	DA	6,037,277	03/14/00	Maskara	et al.			11/14/96		
E Co	DB	6,063,714	5/16/00	Smith et	al.			11/14/96		
Ecc	DC	6,130,152	10/10/00	Smith et	al.			11/14/96		
Ecc	DD	6,159,295	12/12/00	Maskara	et al.			04/22/99		
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ECC	DH	0 454 239 A2	10/30/91	Europe				n/a		
E CC	DI	JP-A-54 109765	08/28/79	Japan				of abstract		
. Ecc	DJ	JP-A-06 293971	10/21/94	Japan				of abstract		
Ecc	DK	WO 92/03378	03/05/92	PCT				n/a		
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)								iya —		
	DL									
Ecc		Tillotson et al., "Transparent ultralow-density silica aerogels prepared by a two-step sol-gel process", JOURNAL OF NON-CRYSTALLINE SOLIDS, 145 (1992), pp. 44-50.								
	DM	D. Basmadjian et al., "The Control of the Pore Volume and Pore Size Distribution in Alumina and								
ECC	1	Silica Gels by the Addition of Water Soluble Organic Polymers", December 1962, JOURNAL OF								
Ecc	חאו	CATALYSIS, Volume 1, Number 6, pp. 547 - 563.								
ECC	DO2	Fricke et al., "Aerogels", May 28, 1992, J. Am. CERAM. Soc., 75(8), pp. 2027-2036. Einarsrud et al., CHEM. PROCESS. ADV. MATL., (1992) pp. 355 - 361. (abstract only)								
l l	DP	Haereid, Siv et al., "Mechanical Strengthening of TMOS-Based Alcogels by Aging in Silane Solutions"								
Ecc		1994, JOURNAL OF SOL-GEL SCIENCE AND TECH., Vol. 3, pp. 199-204.								
E.CC	DQ	Haereid, Siv, "Preparation and Characterization of Transparent, Monolithic Silica Xerogels with Low								
	DR	Hrubesh et al. "Diele	Density", January 1993, Norwegian Institute of Technology, Dept. Of Inorganic Hrubesh et al., "Dielectric Properties of Aerogels", J. MATERIALS RESEARCH, V				norganic Cher	No. 7 July 1992		
Ecc	′	pp. 1736-1741.	outo i roperno	of Herogels	, J. IVIAIL	NIALS NESE	ARCH, VUI. 6,	No. 7, July 1993,		
<i>a</i>	DS V. S. Klimenko, L. A. Kulik, and V. V. Vashchinskaya, "Dependence of the Composition					tion and Structure				
ECC	1	of Silicic Acid Xerogels on the Nature of the Solvent", 1986, UKRAINSKII KHIMICHESKII ZHURNAL.						KII ZHURNAL, Vol.		
	DT,	52, No. 12, pp. 1247 -		rksity verogels	at ambia	at mmaaa	Iounius on	Nov		
Ecc		Smith et al., "Preparation of low-denksity xerogels at ambient pressure", JOURNAL OF NON-CRYSTALLINE SOLIDS, 186 (1995) pp. 104 - 112.								
800	DU	Yokogawa, H., Yokoyama, M., "Hydrophobic Silica Aerogels", JOURNAL OF NON-CRYSTALLINE								
	DV	SOLIDS, 186 (1995) pp. 23-29.								
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800		SOC. SYMP. PROC. Vo	3 431 (1006)	nn 207 202	Matariala	Daggarah C	n of Silica Ae	rogeis", MAT. RES.			
	EF	Prakash et al "Amhi	ent Pressure s	ilian Apropol I	Pilme" NA	T Dro Co	C. Cur m. Do.	o W. L. 271 (1005)			
Ecc	1 .	Prakash et al., "Ambient-Pressure silica Aerogel Films", MAT. RES. Soc. SYMP. PROC. Vol. 371 (1995) pp. 205-210, Materials Research Society.									
	EG	Smith et al., "Preparation of Low-Density Xerogels at Ambient Pressure for Low K Dielectrics", MAT.									
Ecc	LO	Des Soc Syxin Dro	C Val 271 (ensity Aeroge	is at Ambi	ent Pressur	e for Low K. I	Dielectrics", MAT.			
. E.C.C	EH /	RES. SOC. SYMP. PROC. Vol. 371 (1995) pp. 261-272, Materials Research Society.									
8cc	EI	U.S. Patent Application Serial No. 08/746,688 filed 11/14/96									
			U.S. Patent Application Serial No. 08/748,927 filed 11/14/96								
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E CC	EK 4	U.S. Patent Application Serial No. 09/324,370 filed 06/02/99 U.S. 6,380, 105									
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